

REMARKS/ARGUMENTS

Claims 1-9 and 17-28 are pending in the Application. Claims 10-16 have been withdrawn. All of the pending claims have been rejected. In this Response, claim 24 has been amended.

1. Elections/Restrictions

Applicants confirm that they elect to prosecute the claims in Group I (claims 1-9 and 17-28) without traverse. The inventorship of the application does not need to be amended in response to this election.

2. Claim Objections

The misspelling of “comprises” in claim 24 has been corrected.

3. Claim Rejections – 35 U.S.C. § 112

Claims 1-9 and 17-28 were rejected under 35 USC § 112 as allegedly containing subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. The rationale for this rejection appears to be that the term “molecules having multivalent metal cations associated therewith” represents an overly broad genus because the only examples of that genus listed in the specification are the amino acids polylysine and polyarginine. Before addressing the adequacy of the application’s support for the term “molecules having multivalent metal cations associated therewith”, Applicants must point out that the specification does not present polylysine and polyarginine as examples of “molecules having multivalent metal cations associated therewith.” Instead, those two amino acids are presented as examples of the genus of “polyions”, and of the species of “polycations”. See, e.g., Application pg. 12 lines 17-29 (paragraph [0055]); and pg. 20 lines 8-10 (middle of paragraph [0078]). The specification describes “molecules having multivalent metal cations associated therewith” as another species of the genus “polyions”. See Application pg. 20 lines 12-14. The specification provides a number of examples of the species of “molecules having multivalent metal cations associated therewith”. See Application pg. 20 lines 12-20. Now that the term at issue has been placed in the proper context, Applicants can address the issue of whether that term finds adequate support in the specification.

Applicants assert that the issue of whether claims 1-9 and 17-28 meet the written description requirement of 35 U.S.C. § 112 has been settled by litigation involving patents to which this application claims direct priority. This application is a continuation of Application No. 10/057,812, now US Patent No. 6,689,565, which was a continuation of Application Serial No. 09/727,532, now US Patent No. 6,436,646, which is a continuation of Application No. 09/569,193, now US Patent Nos. 6,472,141, which was a continuation-in-part of Application No. 09/316,447, now US Patent No. 6,287,774. Two of the patents to which this application claims priority, US Patent Nos. 6,287,774 and 6,472,141 were asserted by Caliper Technologies (which subsequently became Caliper Life Sciences, the owner of this pending application) against Molecular Devices Corporation. Caliper's patent infringement claim was litigated in the United States District Court for the Northern District of California as Case No. C 02-01837. Although the case settled before the Court issued a final judgment, the case proceeded far enough so that the Court issued a Claim Construction Order in which it interpreted the scope of the asserted claims. A copy of the Claim Construction Order was submitted in the IDS that was filed along with this Application (Non-patent reference Cite No. DO). Note that this application is a direct continuation from US Patent 6,472,141, not a continuation-in-part, so the specifications in this Application and in US Patent 6,472,141 are essentially identical. In the Claim Construction Order, the Court interpreted the meaning of the term "binding component comprising multivalent metal ions associated therewith", which occurred in several dependent claims in US Patent 6,472,141. See Claim Construction Order, pgs. 13-15. The Court held that the term "binding component comprising multivalent metal ions associated therewith" means "a polycationic component that includes but is not limited to metallic ions, which are metal atoms or groups of atoms, bearing multiple electrical charges, and that is of sufficient size to cause a change in the level of fluorescence polarization upon its association with a smaller molecule when it binds to it in a non-specific, charge-dependent manner." Claim Construction Order pgs. 14-15. There is no meaningful difference between the term "binding component comprising multivalent metal ions associated therewith", which was interpreted by the Court, and the term "molecule having multivalent metal cations associated therewith", which is the term that the Examiner contents is not adequately described in the specification. The Court's Claim Construction makes it clear that the specification makes it clear that the term "molecule having multivalent metal cations associated therewith" does not refer to an arbitrarily large genus. Instead, the specification

provides structural limitations and requirements that provide guidance on the identification of molecules that meet the functional limitations. For example, the Court found that the specification states that the molecule must be “polycationic”, “of sufficient size to cause a change in the level of fluorescence polarization when it binds with a smaller molecule”, and capable of binding with the smaller molecule in “a non-specific, charge-dependent manner.” Furthermore, several examples of molecules having multivalent metal cations are provided in the specification. See e.g. Application pg. 20 lines 12-20. Therefore, Applicants assert that the term “molecule having multivalent metal cations associated therewith” is adequately described in the specification, and that the rejection of claims 1-9 and 17-28 under 35 USC § 112 should be withdrawn.

4. Claim Rejections – 35 U.S.C. § 112

Claims 1-9 and 17-28 have been rejected for allegedly being anticipated under 35 USC § 102(a) by Coffin et al., *Analytical Biochemistry* **278**, 206-212 (2000). This rejection cannot stand because the Coffin article is not prior art. This Application is the latest application in a line of continuations from Application No. 09/569,193, now US Patent No. 6,472,141, which was filed on May 11, 2000. Therefore all of the subject matter in the pending Application has a priority date of at least May 11, 2000. Application No. 09/569,193 was a continuation-in-part of Application No. 09/316,447, now US Patent No. 6,287,774, which was filed on May 21, 1999, and which claims priority from provisional applications filed on September 28, 1999 and June 16, 1999. Any claims in this pending Application that are supported by the subject matter in Application No. 09/316,447 (US Patent No. 6,287,774) will have a priority date of no later than May 21, 1999, and possibly as early as June 16, 1999. See e.g. MPEP § 706.02, subsection V. Since the Coffin article was published sometime in 2000, Coffin would not be prior art under 35 USC § 102(a) to any claimed subject matter that finds support in the disclosure of Application No. 09/316,447 (US Patent No. 6,287,774) since that application was filed on May 21, 1999. Support for claims covering methods of measuring kinase enzyme activity by using a “molecule having multivalent metal cations associated therewith” can be found on pg. 19 line 9 (beginning of paragraph [0075]) through pg. 20 line 20 (end of paragraph [0078]) of the Application. This part of the Application was present in Application No. 09/316,447. This can be confirmed by examining the patent that resulted from Application No. 09/316,447, US Patent No. 6,287,774.

The portion of US Patent No. 6,287,774 running from col. 12 line 46 through col. 13 line 46 is word for word identical to the above cited portion of the Application. Since the portion of the Application supporting the pending claims relates back to the disclosure of Application No. 09/316,447 (US Patent No. 6,287,774), the priority date for the pending claims cannot be later than May 21, 1999. Therefore the Coffin reference, published sometime in 2000, cannot be prior art to the pending claims. The 35 USC § 102(a) rejections of claims 1-9 and 17-28 cannot be sustained.

Conclusion

For the foregoing reasons, Applicant believes all the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned attorney.

Respectfully submitted,



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Signed: _____

Michael Moores